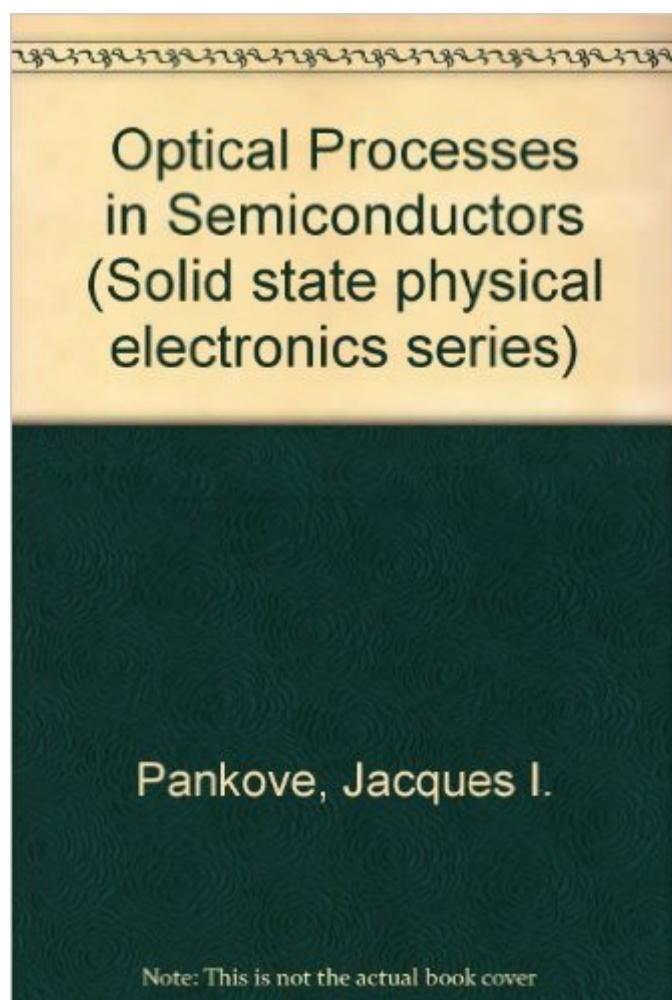


The book was found

# Optical Processes In Semiconductors (Prentice-Hall Electrical Engineering Series. Solid State Physical Electronics Series)



## Synopsis

Based on a series of lectures at Berkeley, 1968-1969, this is the first book to deal comprehensively with all of the phenomena involving light in semiconductors. The author has combined, for the graduate student and researcher, a great variety of source material, journal research, and many years of experimental research, adding new insights published for the first time in this book. Coverage includes energy states in semiconductors and their perturbation by external parameters, absorption, relationships between optical constants, spectroscopy, radiative transitions, nonradiative recombination, processes in pn junctions, semiconductor lasers, interactions involving coherent radiation, photoelectric emission, photovoltaic effects, polarization effects, photochemical effects, effect of traps on luminescence, and reflective modulation. The author has presented the subject in a manner which couples readily to physical intuition. He introduces new techniques and concepts, including nonradiative recombination, effects of doping on optical properties, Franz-Keldysh effect in absorption and emission, reflectance modulation, and many others. Dr. Pankove emphasizes the underlying principle that can be applied to the analysis and design of a wide variety of functional devices and systems. Many valuable references, illustrative problems, and tables are also provided here.

## Book Information

Series: Prentice-Hall electrical engineering series. Solid state physical electronics series

Hardcover: 416 pages

Publisher: Prentice Hall; 1St Edition edition (August 13, 1971)

Language: English

ISBN-10: 0136380239

ISBN-13: 978-0136380238

Product Dimensions: 9.1 x 6.6 x 1.1 inches

Shipping Weight: 1.6 pounds

Average Customer Review: 4.8 out of 5 stars [See all reviews](#) (6 customer reviews)

Best Sellers Rank: #3,270,004 in Books (See Top 100 in Books) #72 in Books > Engineering & Transportation > Engineering > Electrical & Electronics > Electronics > Solid State

## Customer Reviews

This book for me is a "book of revealing semiconductor secrets" which includes good in-depth details of fundamental semiconductors that majority of semiconductor books, published in last 10-15 years do not include. Since it was written over 30 years or so back, it includes basic stuff, which is

what your advisor or lecturer at university "expects" you to know or understand without a problem (of course in reality nothing is easy unless one knows about it and this book, I feel, does provides those basic answers :o)

Useful. Started as a good introduction but then evolved to outdated review. I wish I know a better introductory book on this topic but this one is not satisfactory either.

Good condition. Everything that was promised.

[Download to continue reading...](#)

Optical Processes in Semiconductors (Prentice-Hall electrical engineering series. Solid state physical electronics series) Fundamentals of Network Analysis and Synthesis (Prentice-Hall electrical engineering series. Solid state physical electronics series. Prentice-Hall networks series) Mosfet Modeling for VLSI Simulation: Theory And Practice (International Series on Advances in Solid State Electronics) (International Series on Advances in Solid State Electronics and Technology) The Physics And Modeling of Mosfets (International Series on Advances in Solid State Electronics) (International Series on Advances in Solid State Electronics and Technology (Unnumbered)) Fiber Optics and Optoelectronics (Prentice Hall Series in Solid State Physical Electronics) Waves and Fields in Optoelectronics (Prentice-Hall series in solid state physical electronics) Analysis, Synthesis and Design of Chemical Processes (4th Edition) (Prentice Hall International Series in the Physical and Chemical Engineering Sciences) 4th (fourth) Edition by Turton, Richard, Bailie, Richard, Whiting, Wallace B., Shaei [2012] Prentice hall literature (common core edition) (teachers edition grade 6) (Prentice Hall and Texas Instruments Digital Signal Processing Series) Photonics: Optical Electronics in Modern Communications (The Oxford Series in Electrical and Computer Engineering) Power Systems Analysis (Prentice-Hall Series in Electrical and Computer Engineering) Process Fluid Mechanics, (Prentice-Hall International Series in the Physical and Chemical Engineering Sciences) Electrochemical Systems (Prentice-Hall International Series in the Physical and Chemical Engineering Sciences) Dynamics of Structures (4th Edition) (Prentice-Hall International Series in Civil Engineering and Engineering Mechanics) Dynamics of Structures (5th Edition) (Prentice-Hall International Series I Civil Engineering and Engineering Mechanics) Dynamics of Structures (Prentice-Hall International Series in Civil Engineering and Engineering Mechanics) Structural Dynamics by Finite Elements (Prentice-Hall International Series in Civil Engineering and Engineering Mechanics) Concrete (Prentice-Hall International Series in Civil Engineering and Engineering Mechanics) Systems Engineering and Analysis (5th Edition) (Prentice

Hall International Series in Industrial & Systems Engineering) Towards Solid-State Quantum Repeaters: Ultrafast, Coherent Optical Control and Spin-Photon Entanglement in Charged InAs Quantum Dots (Springer Theses) Optical Interconnects (Synthesis Lectures on Solid-State Materials and Devices)

[Dmca](#)